

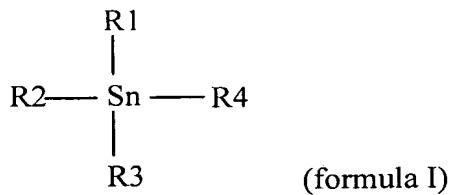
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-19 (Canceled).

20. (Currently Amended) A catalytic composition useful for esterification, transesterification and polycondensation reactions, said catalytic composition comprising a mixture of:

(A) at least one organotin compound of the general formula (I):



wherein

R1 is selected from the group consisting of linear, branched or cyclic alkyl groups having 1 to 40 carbon atoms, aryl groups having 1 to 40 carbon atoms, and substituents selected from the group: $-\text{X}-\text{R}^{\text{A}}$, wherein R^{A} is $-\text{CN}$, $-\text{COOH}$, $-\text{COO-methyl}$, $-\text{COO-ethyl}$, $-\text{COO-n-propyl}$, $-\text{COO-isopropyl}$, $-\text{COO-n-butyl}$, $-\text{COO-2-butyl}$, $-\text{COO-iso-butyl}$, $-\text{COO-tert-butyl}$, $-\text{COO-n-pentyl}$, $-\text{COO-isopentyl}$, $-\text{COO-neo-pentyl}$, $-\text{COO-tert-pentyl}$, $-\text{COO-hexyl}$, $-\text{COO-heptyl}$, $-\text{COO-n-octyl}$, $-\text{COO-iso-octyl}$, $-\text{COO-2-ethyl-1-hexyl}$, $-\text{COO-2,2,4-trimethylpentyl}$, $-\text{COO-nonyl}$, $-\text{COO-decyl}$, $-\text{COO-dodecyl}$, $-\text{COO-cyclopentyl}$, $-\text{COO-cyclohexyl}$, $-\text{COO-cycloheptyl}$, $-\text{COO-methylcyclohexyl}$, $-\text{COO-vinyl}$, $-\text{COO-1-propenyl}$, $-\text{COO-2-propenyl}$, $-\text{COO-naphtyl}$, $-\text{COO-anthranyl}$, $-\text{COO-phenanthryl}$, $-\text{COO-o-tolyl}$, $-\text{COO-p-tolyl}$, $-\text{COO-m-tolyl}$, $-\text{COO-tolyl}$, $-\text{COO-ethylphenyl}$, $-\text{COO-mesityl}$, $-\text{COO-benzyl}$, $-\text{COO-phenyl}$, $-\text{COOC}_2\text{H}_4\text{OH}$, $-\text{COOC}_3\text{H}_6\text{OH}$, $-\text{COOC}_4\text{H}_8\text{OH}$, $-\text{COOCH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{OH}$; and $-\text{X}-$ is $-\text{CH}_2-$, $-\text{C}_2\text{H}_4-$, $-\text{C}_3\text{H}_6-$, $-\text{C}_4\text{H}_8-$, $-\text{C}_5\text{H}_{10}-$, and $-\text{C}_6\text{H}_{12}-$;

R₂ is selected from the group consisting of linear, branched or cyclic alkyl groups having 1 to 40 carbon atoms, aryl groups having 1 to 40 carbon atoms and anionic ligands with O-coordination of the group selected from -O, -OH, linear, branched or cyclic alkyl or arylcarboxy groups having 1 to 40 carbon atoms, linear, branched or cyclic alkyl-, and aryl alcoholate groups having 1 to 40 carbon atoms; and

R₃ and R₄ are each independently selected from the group consisting of anionic ligands with O-coordination of the group selected from -O, -OH, linear, branched or cyclic alkyl groups or arylcarboxy groups having 1 to 40 carbon atoms, linear, branched or cyclic alkyl-, and aryl alcoholate groups having 1 to 40 carbon atoms and anions of a mineral acid selected from the group of sulphate, sulphite, phosphate, halogen- and pseudohalogen anion; and

(B) at least one compound according to one of the formulae (II), (III) and/or (IV),



wherein X is a heteroatom selected from the group consisting of N, Si, Cl, Br, I and S,

m is an integer from 1 to 5,

n is an integer from 1 to 5,

o is an integer from 1 to 5,

p is an integer from 0 to 5,

q is an integer from 0 to 5,

r is an integer from 0 to 3,

R' in formula (II) denotes n different or identical groups, each being independent from each other and selected from the group of linear, branched or cyclic alkyl groups having 1 to 40 carbon atoms, aryl groups having 1 to 40 carbon atoms, anionic ligands with O-coordination selected from the group of -O, -OH, linear, branched and cyclic alkyl-, and aryl alcoholate groups having 1 to 40 carbon atoms, H, Cl, Br, NH₄⁺ or a metal ion,

R' in formula (III) denotes o different or identical groups, each being independent from each other and selected from the group of linear, branched or cyclic alkyl groups having 1 to 40 carbon atoms, aryl groups having 1 to 40 carbon atoms, anionic ligands with O-coordination selected from the group of $-O$, $-OH$, linear, branched or cyclic alkyl-, and aryl alcoholate groups having 1 to 40 carbon atoms, H , Cl , Br , NH_4^+ and a metal ion,

R' in formula (IV) denotes q different or identical groups, each being independent from each other and selected from the group of linear, branched or cyclic alkyl groups having 1 to 40 carbon atoms, aryl groups having 1 to 40 carbon atoms, anionic ligands with O-coordination selected from the group of $-O$, $-OH$, linear, branched or cyclic alkyl-, and arylalcoholate groups having 1 to 40 carbon atoms, H , Cl , Br , NH_4^+ and a metal ion, or

X is P , then

m is an integer from 1 to 5,

n is an integer from 1 to 5,

o is an integer from 1 to 5,

p is an integer from 0 to 5

q is an integer from 0 to 5,

r is an integer from 0 to 3,

R' in formula (II) denotes n different or identical groups, each being independent from each other and selected from the group of linear, branched or cyclic alkyl groups having 1 to 40 carbon atoms, aryl groups having 1 to 40 carbon atoms, anionic ligands with O-coordination selected from the group of $-O$, $-OH$, linear, branched or cyclic alkyl-, and aryl alcoholate groups having 1 to 40 carbon atoms, H , Cl , Br , NH_4^+ and a metal ion,

R' in formula (III) denotes o different or identical groups, each being independent from each other and selected from the group of linear, branched or cyclic alkyl groups having 1 to 40 carbon atoms, aryl groups having 1 to 40 carbon atoms, anionic ligands with O-coordination selected from the group of $-O$, $-OH$, linear, branched or cyclic alkyl-, and aryl alcoholate groups having 1 to 40 carbon atoms, H , Cl , Br , NH_4^+ and a metal ion, with the proviso that when $\underline{m=1}$ $\underline{o=3}$, then:

(a) ~~$R1', R2', R3'$ are each R'~~ is independently, methyl, ethyl, n-propyl, iso-propyl, n-butyl, 2-butyl, iso-butyl, tert-butyl, n-pentyl, iso-pentyl, neo-pentyl, tert-pentyl, hexyl, heptyl, n-octyl, iso-octyl, 2,2,4-trimethylpentyl, nonyl, decyl, dodecyl, n-dodecyl,

cyclopentyl, cyclohexyl, cycloheptyl, methylcyclohexyl, vinyl, 1-propenyl, 2-propenyl naphthyl, anthryl, phenanthryl, o-tolyl, p-tolyl, m-tolyl, xylyl, ethylphenyl, mesityl, phenyl, benzyl, methanolate, ethanolate, n-propanolate, iso-propanolate, n-butanolate, 2-butanolate, iso-butanolate, tert-butanolate, n-pantanolate, isopentanolate, neo-pantanolate, tert-pantanolate, 2-methyl-1-butanolate, hexanolate, heptanolate, n-octanolate, iso-octanolate, 2,2,4-trimethylpentanolate, nonanolate, decanolate, dodecanolate, n-dodecanolate, cyclopantanolate, cyclohexanolate, cycloheptanolate, methylcyclohexanolate, glycolate, glycerate, pinacolate, neopentylglycolate, vinylalcoholate, propargylalcoholate, 2-ethyl-1-hexanolate, ethyleneglycol, diethyleneglycol, or benzylalcoholate; or

(b) R1' and R2' two of the R's are each independently, methyl, ethyl, n-propyl, iso-propyl, n-butyl, 2-butyl, iso-butyl, tert-butyl, n-pentyl, isopentyl, neo-pentyl, tert-pentyl, hexyl, heptyl, n-octyl, iso-octyl, 2,2,4-trimethylpentyl, nonyl, decyl, dodecyl, n-dodecyl, cyclopentyl, cyclohexyl, cycloheptyl, methylcyclohexyl, vinyl, 1-propenyl, 2-propenyl naphthyl, anthryl, phenanthryl, o-tolyl, p-tolyl, m-tolyl, xylyl, ethylphenyl, mesityl, phenyl, benzyl, methanolate, ethanolate, n-propanolate, iso-propanolate, n-butanolate, 2-butanolate, iso-butanolate, tert-butanolate, n-pantanolate, isopentanolate, neo-pantanolate, tert-pantanolate, 2-methyl-1-butanolate, hexanolate, heptanolate, n-octanolate, iso-octanolate, 2,2,4-trimethylpentanolate, nonanolate, decanolate, dodecanolate, n-dodecanolate, cyclopantanolate, cyclohexanolate, cycloheptanolate, methylcyclohexanolate, glycolate, glycerate, pinacolate neopentylglycolate, vinylalcoholate, propargylalcoholate, 2-ethyl-1-hexanolate, ethyleneglycol, dieethylene-glycol, triethyleneglycol and benzylalcoholate, and R3' the third R' is H, and

R` in formula (IV) denotes q different or identical groups, each being independent from each other selected from the group of linear, branched or cyclic alkyl groups having 1 to 40 carbon atoms, aryl groups having 1 to 40 carbon atoms, anionic ligands with O-coordination selected from the group of -O, linear, branched or cyclic alkyl-, and aryl alcoholate groups having 1 to 40 carbon atoms, H, Cl, Br, NH₄⁺ and a metal ion.

21. (Previously Presented) The catalytic composition according to claim 20, wherein the metal ion is selected from the group consisting of NH₄, Li, Na, K, Rb, Cs, Mg, Ca, Sr, Ba, Zn, B, Al, Sc and Y.

22. (Previously Presented) The catalytic composition according to claim 20, wherein (B) is a phosphite, a phosphine, a phosphonic acid ester, a pyrophosphate, an alkaline halogenide, an earth alkaline halogenide or aluminum halogenide.

23. (Previously Presented) The catalytic composition according to claim 20, comprising a molar ratio of (A) to (B) of 1:0.001 to 1:200, respectively.

24. (Previously Presented) The catalytic composition according to claim 20, further comprises a suspension agent or solvent.

25. (Previously Presented) A process for the continuous or batchwise catalysis of esterification, transesterification, polyesterification, polytransesterification reactions of an alcohol and an acid or acid derivative, such as an ester, anhydride or halogenide, said process employing the catalytic composition as defined in claim 20.

26. (Previously Presented) The process according to claim 25, employing an amount of (A) in the range of 0.1 to 1% by weight , with respect to the acid or ester to be reacted.

27. (Previously Presented) The process according to claim 26, employing a concentration of (B) in the range of 0.0001 ppm to 1% by weight, with respect to the acid or ester to be reacted.

28. (Previously Presented) The process according to claim 25, employing a concentration of (B) in the range of 0.0001 ppm to 1% by weight, with respect to the acid or ester to be reacted.

29. (Previously Presented) The process according to claim 25, comprising reacting a dicarboxylic acid or a dicarboxylic acid derivative with a divalent alcohol in the polyesterification reaction.

30. (Previously Presented) The process according to claim 25, employing derivatives of mono-, di or polycarboxylic acids selected from esters and halogenides.

31. (Previously Presented) The process according to claim 25, comprising reacting hydroxycarboxylic acids or derivatives of hydroxycarboxylic acids in the esterification, transesterification, polyesterification or polytransesterification reaction.

32. (Previously Presented) The process according to claim 31, employing derivatives of hydroxycarboxylic acids selected from esters and ethers.

33. (Previously Presented) The process according to claim 25, employing a solvent or suspending agent added to (A) and (B).

34. (Previously Presented) The process according to claim 33, employing an alkane mono-, di- or polyvalent alcohol as the solvent or suspending agent.

35. (Previously Presented) The process according to claims 33, employing the same solvent and/or suspending agent during manufacturing of the catalytic composition and said esterification, transesterification, polyesterification or polytransesterification reaction.

36. (Previously Presented) The process according to claim 35, employing a solvent selected from the group consisting of mono-, di- and polyvalent alcohols reacted in said esterification, transesterification, polyesterification or polytransesterification reaction.

37. (Previously Presented) The process according to claim 33, employing a different solvent and/or suspending agent during manufacturing the catalytic composition and said esterification, transesterification, polyesterification or polytransesterification reaction.

38. (Previously Presented) A composition comprising polyester for bottles, films, foils, yarn and/or molded padding, or resin for powder coatings or technical synthetic materials, obtained by the process according to claim 25.

39. (Previously Presented) The polyester or resin composition according to claim 38, wherein said polyester is selected from the group consisting of polyethylene terephthalate, poly-2,2-dimethylpropyl-1,3-terephthalate, polypropylene terephthalate, polydiethyleneglycol

terephthalate, polybutylene terephthalate, polynaphthalene terephthalate, polyethylene naphthalate, and mixtures thereof.